

#### **Participant Information**

Please print or type

Name:

Address:
City:
State:
Zip:
County:
Telephone: ()
■ How long have you been feeding hummingbirds at this location?
number of years
■ Is your residence in a rural or urban area? (check one)
■ Is your residence on less than ½ acre ½ - 1 acre
more ( number of acres)

Completed survey forms should be mailed by January 18, 2008, to:
Hummingbird Roundup
Wildlife Diversity Branch
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78744

Participants who mail in the completed survey will receive a hummingbird newsletter that will summarize the results of the year's survey.

(This survey form is printed on recycled paper.)

# The Texas Hummingbird Roundup Backyard Survey

Sponsored by the

Wildlife Diversity Branch · Wildlife Division · Texas Parks and Wildlife Department

## Welcome to the 2007 Texas Hummingbird Roundup!

The Hummingbird Roundup continues to be very popular with the people of Texas. As more people become aware of our great diversity in flying jewels, they begin to look for them more frequently, and the natural progression is to want to record what they see. The possible occurrence of an Amethyst-throated Hummingbird in the Rio Grande Valley and reoccurrence of the Green Violet-ear in Central Texas spurred interest this year.

Through the Roundup, people of Texas have learned to appreciate and admire this great bird resource. Your survey answers help us address questions like "how do I attract hummingbirds to my garden" or "the only hummingbirds in this region are Ruby-throated Hummingbirds." You are also helping us to learn more about the environmental needs of the various species. You learn too as we share our experiences, anecdotes and observations.

So find your nearest chair, pull out the binoculars, fill those feeders and enjoy the 2007 Texas Hummingbird Roundup. Don't forget, keep the camera handy in case one of the rare Texas gems visits your feeder!

## Observation Tips

Even though it would be great to sit by your feeder each day and watch the birds — you don't have to do that. We do recommend that you set aside a certain amount of time during convenient intervals (about two hours per week) to observe each week and then record the highest number of each species and gender observed. Note: Morning coffee and the evening meal are good times to watch because the birds are actively feeding at these hours. If you fall short one week, record what you saw and continue on.

If you think you will have several species over the year, there are a couple of sheets you will want to duplicate. See back page for yearly reporting form and page IA, unusual sighting report. Extra copies of these sheets will assure that you have enough for reporting all of your finds.

#### PUBLICATIONS ON HUMMINGBIRDS

Holmgren, Virginia C. 1986. The Way of the Hummingbird. Santa Barbara, CA: Capra Press.

Johnsgard, P.A. 1983. *Hummingbirds of North America*. Washington, DC: Smithsonian Institution Press.

Shackelford, C.E.; M.M. Lindsay, and C.M. Klym. 2005. *Hummingbirds of Texas*. College Station, Texas: TAMU Press.

Stokes, D. and L. Stokes. 1989. The Hummingbird Book: The Complete Guide to Attracting, Identifying, and Enjoying Hummingbirds. Boston: Little, Brown and Company.

Tyrrell, Esther Q., and Robert A. Tyrrell. 1985. *Hummingbirds*. New York: Crown.

Williamson, Sheri L. 2001. *Peterson Field Guide: The Hummingbirds of North America*. Boston: Houghton Mifflin.

#### **HUMMINGBIRD BOOKLET**

Bird Watcher's Digest, Box 110, Marietta, OH 45750. Reprint. Enjoying Hummingbirds More.

#### **BIRD GUIDES**

Peterson, Roger Tory. 1980. A Field Guide to the Birds East of the Rockies. Boston: Houghton Mifflin.

Peterson, Roger Tory. 1991. A Field Guide to Western Birds. Boston: Houghton Mifflin. Scott, Shirley L., ed. 1983. Field Guide to the Birds of North America. Washington, DC: National Geographic Society.

# Please check habitat descriptions that suit your home: \_\_\_streamside \_\_mountain \_\_forest \_\_desert \_\_brushland \_\_urban landscaped for hummingbirds \_\_urban not landscaped for hummingbirds \_\_approx. elevation above sea level

## Use these abbreviations for species identification:

RTHU = Ruby-throated

BCHU = Black-chinned

RUHU = Rufous

BUFH = Buff-bellied

LUHU = Lucifer

BLUH = Blue-throated

MAHU = Magnificent

BTLH = Broad-tailed

BEHU = Berylline

ANHU = Anna's

CAHU = Calliope

GRMA = Green-breasted Mango

BBLH = Broad-billed

WEHU = White-eared

VCHU = Violet-crowned

COHU = Costa's

ALHU = Allen's

**GRVE** = Green Violet-ear

R/A = Rufous/Allen's type

#### MISSION STATEMENT

The Texas Hummingbird Roundup is a scientific study through which the Texas Parks and Wildlife Department gathers information about hummingbirds from the public while disseminating information on their needs. The survey encourages Texans to maintain natural habitat for the birds, properly care for hummingbird feeders and record sightings. Your answers will be used to further our knowledge of the hummingbirds of Texas and will help the Wildlife Diversity Branch in its mission to help keep our tiny visitors returning each year.

(Please circle or check all that apply)

bird bath

none

fountain sprinkler

mister

other\_

1) When was the <b>first</b> hummingbird seen in your yard this year? (month/day)/
2) What species did you <b>first</b> observe this year?  (please use abbreviations listed above)
3) Was it $1 = \text{male}$ $2 = \text{female}$ $3 = \text{immature}$ $4 = \text{unknown}$ ?
4) What species do you see most often?
5) Did you observe a hummingbird in torpor this year? Yes No Date Time Outside temp Cloud cover Precip
Hummingbird Feeders
6) Do you maintain a year-round feeder? Yes No
7) If no, then when did you have feeders up? (month/day - month/day)//
8) How many feeders do you maintain on a regular basis and during migration?
9) How often do you change and clean your feeder? 2-3 days 4-6 days 6-8 days
Hummingbird Fuel
10) If you make your own hummingbird food, what recipe have you been using?part(s) water topart(s) sugar
11) Do you use red coloring in your mix? Yes No
12) Do you buy your nectar solution? Yes No If yes, what brand(s) do you purchase?
Nesting
13) Did you see a hummingbird nest in your yard this year? Yes No  If yes, a) where was the nest located? tree shrub other (plant species
14) Did you observe any hummingbirds in mating flight? Yes No Time of year: Spring (Mar-April) Summer (May-Aug) Fall (Sept-Dec)
Hummingbird Gardens
15) What percentage of your yard contains native Texas plants? 0-20% 21-40% 41-60% 61-80% 81-100%
16) Do you have mature trees in your yard? Yes No Percent cover: 0-20% 21-40% 41-60% 61-80% 81+%
17) If you planted flowers to attract hummingbirds to your residence, did you plant in a container garden or a yard?container gardenyard
18) What types of plants did you use? Annuals Perennials Biennials (circle all that apply) Vines Shrubs Trees
19) a) Did you plant the seed packet sent to you? Yes No b) Was it successful? Yes No
20) How is water provided for birds in your yard?

# Texas Hummingbird Diversity and Unusual Sightings

Texans, more than most Americans, have greater opportunities to view many different hummingbird species. Because of our state's size and diverse ecology which includes coastal, desert, mountain, tropical, forest and grassland areas, 18 different hummingbird species have been reported. Eleven species occur commonly in Texas. If you live in east to north Texas, you will have at least one (maybe two) species during the migratory year. If you happen to reside in West Texas, around the Lower Rio Grande Valley or on the Gulf Coast, you are likely to see three or more species routinely. You may even have overwintering birds. Our publication, "A Quick Reference Guide to Texas Hummingbirds" will help you determine what species you are likely to see in your area.

In order for the Wildlife Diversity Program to verify sightings of a rare bird, call **(800) 792-1112**, **ext. 4644**. An attached photo will be necessary. Fill out the form below and send it right away. Your description will help biologists determine identification. We will send you a new form. The Roundup has a new group of volunteers who will be called upon to help participants identify and document rare birds when necessary.

#### **Bird Identification Tips**

It is very simple to tell the difference between most adult male and female hummingbirds. The majority of males have a solid colored tail and the majority of females and immature males have white tips on their tail feathers. But, there are a few exceptions to this rule. The following species never have white tips on their tails: Green Violet-ear, Buff-bellied Hummingbird, Broad-billed Hummingbird, White-eared Hummingbird and Violet-crowned Hummingbird. On the other hand, both sexes of the Blue-throated Hummingbird have white tips on the tail feathers. Immature males of all species will begin to show bright colors on their gorget feathers in the late summer.

#### **Common Texas Hummingbirds**

Buff-bellied Hummingbird Blue-throated Hummingbird Magnificent Hummingbird Lucifer Hummingbird Ruby-throated Hummingbird Black-chinned Hummingbird Anna's Hummingbird Calliope Hummingbird Broad-tailed Hummingbird Rufous Hummingbird Allen's Hummingbird

If you see these species outside their usual habitat, a careful note or completion of the form below would be appreciated.

#### **Unusual Texas Sightings**

These birds must be accompanied by a Rare Bird Sighting report and photo.

While these birds are recorded in Texas, their occurrence is rare. Any sightings of these birds should be accompanied by a phone call to (800) 792-1112, ext. 4644 and photographs.

Green-Violet-ear Hummingbird Green-breasted Mango Broad-billed Hummingbird White-eared Hummingbird Violet-crowned Hummingbird Costa's Hummingbird Berylline Hummingbird

Recent studies have shown that unless the bird is in your hand the Allen's and Rufous species are extremely difficult to distinguish. Except for adult males, suspected Allen's Hummingbirds should be reported as Rufous or Allen's types (R/A).

#### Rare Bird Sighting Report

Call us at (800) 792-1112, ext. 4644.

#### For unusual sightings biologists need to know:

What species do you think you have?

- 1) Color, shape and length of bill are important:
- 2) Coloring and markings on throat, top and front of head:
- 3) Color of back and underparts:
- 4) Color and movement of tail while hovering:
- 5) How long the bird has been visiting your feeder or yard:
- 6) Any different sounds made by the hummingbird:

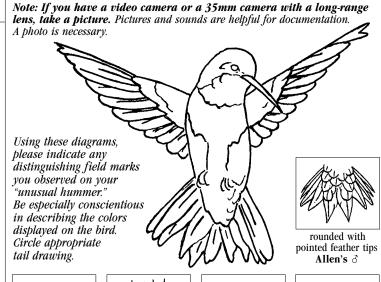
Name:

Address:

County:

Telephone: (daytime):

(evening):





forked with pointed feather tips **Ruby-throated** 3



slightly forked with normal feather tips **Buff-bellied**  $\vec{\circ}$  ÷  $\circ$ 



deeply forked with extremely pointed feather tips
Lucifer 3



rounded with normal (blunt) feather tips **Broad-tailed** \$\partial\$

Fill in completely and mail to: Hummingbird Roundup, Wildlife Diversity Branch, Texas Parks and Wildlife Department, 4200 Smith School Road, Austin, Texas 78744.

## Attracting Hummingbirds to your Backyard

It's easy to attract these tiny treasures to your backyard. The secret to luring hummingbirds can be summed up in three words: plants, feeders and patience.

#### Plants and Trees

Whether you live in the country with lots of space to plant a large, elaborate garden or in an apartment with just a deck or patio, you can plant a beautiful garden that will attract hummingbirds.

While hummingbirds feed on a wide variety of plants, they seem to prefer feeding at flowers that are brightly-colored and funnel-shaped. Orange and red flowers are high on hummingbirds preference list, but hummers will feed from other nectar flowers regardless of their color. When choosing flowers, select a variety of plants that will provide a profusion of blooms from early spring through fall and winter. Pay attention to where and how your flowers are planted. Planting groups of flowers in different locations in your yard will help reduce conflicts between the birds feeding in your yard.

Trees provide perches and also harbor insects that are important hummingbird food. Even small trees can break up the space so the birds can establish several territories. Larger trees may provide nesting sites. If you have the space, plant a native tree today.

#### **Feeders**

Using a hummingbird feeder is also a great way to increase the chance of seeing a hummingbird. There are several things to keep in mind when purchasing and using a feeder. The following points will make your backyard feeding station more hospitable for the hummingbird.

- When selecting your feeder, make sure it does not drip. A leaky feeder attracts ants and other feeder pests. Note: Your feeder is more likely to drip if you fill it with cold sugar-water mixture and place it outside when the weather is very hot.
- Hang your feeder high enough that cats cannot jump to catch the hummingbirds. The feeder should not be in direct sunlight all day. Do not hang the feeder close to patio doors or picture windows that reflect the flowers, trees and sky, as the hummingbirds are likely to crash into the window as they dart away from the feeder.

Hummingbirds seem to prefer a small limb-perch five to fifteen feet from the feeder so they can eat and then perch to "guard" the feeder.

- Purchase a bee guard that will keep flying pests, such as bees, wasps and yellow jackets, away from the feeder.

  These protective screens are big enough to allow hummers to feed, but help keep airborne pests away.
- Buy feeders that are easy to clean and do so often to prevent the growth of mildew and harmful bacteria. In warm weather clean your feeder every 2-3 days. The warm sun causes the sugar solution to spoil more quickly, which can pose a risk to feeding birds. (Using a boiled sugar solution will help retard spoilage.)
- You may want to purchase a feeder equipped with a perch. Hummingbirds will use a perch to feed, allowing you a chance to view the bird more easily. However, there is no evidence to suggest that feeders with perches are more attractive to the birds. Feeders without perches tend to exclude other birds.
- Your feeder will not prevent hummingbirds from migrating; it will give hummers a place to stop and refuel on their way south. Keeping your feeder active all year is advised.

#### **Patience**

Your patience and hard work luring your first hummingbird will pay off the first time you see the tiny creature swiftly flying and feeding in your garden or at your feeder. These inquisitive little birds will provide you with great delight and amazement as you watch their airborne acrobatics and feisty antics. The Wildlife Diversity Program recommends that Hummingbird Roundup participants use a feeder in conjunction with a garden. By providing a feeder and flowering plants, you can help provide a habitat for hummingbirds and ensure that they visit your home time and time again.

**2007 Texas Hummingbird Roundup Credits:** The Texas Hummingbird Roundup is a project of the Wildlife Diversity Branch. Special thanks to Georgia Department of Natural Resources. The Texas Hummingbird Roundup is coordinated by Project Coordinator, Mark Klym.

#### **Hummingbird Rehabilitation**

While we do not like to see it, hummingbirds, like every other animal, are occasionally injured. If you suspect a hummingbird is sick, injured or orphaned, please observe the animal closely but do not intervene until you are sure the animal needs help.

If you observe the injury, pick it up and immediately place it in your palm and offer it sugar solution from your feeder. It may revive quickly and soon fly away. If you must shelter the bird, it is important that a wildlife rehabilitator be called immediately. Please visit www.tpwd.state.tx.us/huntwild/wild/ rehab/ for a list of licensed rehabbers. Place the bird in a small box, protect it from injury and disturbance, and keep it in a warm location (birds DO NOT like airconditioned rooms!). Thank you for your concern and for helping us ensure that as many of these birds as possible can be returned to their natural environments.

#### **Hummingbird Gardening**

If you would like information on gardening for hummingbirds and other wildlife, call or write for "Texas Wildscapes" (512) 389-4644. By participating in this program, property owners receive information on how to provide the basics of food, water and cover for wildlife. See enclosed form to order.



This beautiful 10" full-color identification wheel will help you recognize each of the hummingbird species found in Texas and North America. The front of the wheel has color illustrations and descriptions of 16 North American hummers. The back contains more information on other hummer species, a nectar recipe and fun humming-bird facts. Your purchase of the wheel will help fund research, habitat conservation and management for these enchanting birds. See enclosed form to obtain this hummingbird wheel.

## Tips on Tricky Hummingbirds

Low light or poor angle situations make hummingbird identification a challenge – especially when the books tell you to look for the colorful gorget on the male which is almost never seen. There are other observations you can make to help in identification of these birds. Some of them are set up here in combinations with the birds they are often confused with.

Bill Length Wing Length and Shape Tail Shape Behavior	<ul> <li>Black-chinned</li> <li>Long - often half again the width of the head</li> <li>Long, club-shaped wing extending to the tip of the tail</li> <li>Forked, but not as sharply as the Ruby-throated</li> <li>Pumps tail when hovering</li> </ul>	<ul> <li>Ruby-throated</li> <li>Moderate – about the width of the head</li> <li>Shorter, tapered wing extending less than the length of the tail</li> <li>Deeply forked</li> <li>Tail almost still when hovering</li> </ul>
General Characteristics Bill Characteristics Tail Shape and Color  Back Colors	<ul> <li>Magnificent</li> <li>Large dark bird, seems slower moving</li> <li>Very long, straight black bill</li> <li>All dark colored tail, adult female will have small white corners on an otherwise green upper tail. Tail fan shaped</li> <li>Uniform green coloration from top of head to tip of tail</li> </ul>	<ul> <li>Blue-throated</li> <li>Large dark, seemingly slower bird</li> <li>Shorter, straight black bill</li> <li>Oversized black tail. All birds will have large white corners on an otherwise black upper tail. Oversized tail appears rounded</li> <li>Green from top of head to top of tail. Tail black</li> </ul>
General Characteristics Bill Shape and Color  Belly Tail and Rump Wing Color	Berylline  Dark green overall with rufous tail  Orange red lower mandible with some black on the upper mandible as a juvenile. Black recedes as an adult  Gray belly Rufous tail with purple black uppertail coverts Rufous wings	<ul> <li>Buff-bellied</li> <li>Dark green overall with rufous tail</li> <li>Red bill tipped with black. Some report juveniles have a black upper mandible which recedes to a black tip</li> <li>Buffy belly</li> <li>Rufous tail with bronze green uppertail coverts</li> <li>Dark wings – green to black</li> </ul>
General Characteristics Tail Gorget Bill Sound	Calliope - Small bird present September-February - Short, squared tail - STRIPED or streaked rosy red - Short, thin bill - Pale buffy	Archilochus Young  Birds will be the same size as adult Ruby-throated or Black-chinned. Present June-October  Forked tails longer in both species  Will be spotted with some spots more dominant than others, usually dominant to the center of the throat  Much longer, typical length for adult Ruby-throated or Black-chinned  Gray
General Characteristics Tail Coloration Sound	<ul> <li>Broad-tailed</li> <li>Larger green bird with white breast and rosy red throat on male</li> <li>Long, broad tail</li> <li>Will have a lot of rufous on top of tail, flanks buffy</li> <li>Male makes a shrill trill sound when in aggressive flight</li> </ul>	<ul> <li>Ruby-throated</li> <li>Average sized green bird with white breast and ruby red throat on male</li> <li>Average length forked tail</li> <li>No rufous, very little buff on flanks</li> <li>Wings make typical humm sound</li> </ul>
Bill Head Female Head Wings Size	Anna's  • Short, straight bill  • Red crown and throat with a white eye ring  • Gray cheeks and throat, green crown separated by slight white over eye band  • Do not extend to tip of tail  • Slightly larger bird	Costa's  Short slightly curved bill  Purple crown and throat with long flared gorget and white eyebrow  Gray cheek separates white throat from green cap  Project just beyond tip of tail  Average sized hummingbird

## **General Tips**

- Do not attempt to guess the bird's size use a comparison to common hummingbirds.
- · Notice bill color, shape.
- · Notice wing lengths.
- Do not rely on behaviors unless they are known to be consistent.
- Rufous/Allen's unless you get a good look and photo of the spread tail assume it is Rufous.

## **Hummingbird Feeding Plants**

#### **Acanthus Family:**

Flame acanthus Hummingbird plant Shrimp plant

#### Catalpa Family:

Cross-vine Trumpet creeper Desert willow Yellow trumpets

### Pineapple Family:

Air pine

#### Bluebell Family:

Cardinal Flower

#### Pink Family:

Catchfly

#### **Heath Family:**

Piedmont azalea Texas azalea

#### **Horsechestnut Family:**

Buckeye Red Buckeye

#### Mint Family:

Prairie brazoria
Purple horsemint
Wild bergamot
Spotted beebalm
Tropical sage
Autumn sage
Crimson sage
Big red sage
Cedar sage
Mountain sage
Red hedge-nettle

#### Logania Family:

Carolina jessamine Pink-root

#### **Mallow Family:**

Heart-leaf hibiscus Scarlet hibiscus Turk's cap Globe mallow

#### **Agave Family:**

Century plant Red yucca

#### Borage Family: Geiger tree

Cactus Family: Hedgehog cactus

Honeysuckle Family: Coral honeysuckle

#### **Morning Glory Family:**

Red morning glory Scarlet morning glory Cypress vine

## Ocotillo Family:

#### Legume Family:

Lead plant amorpha
False indigo
Smooth amorpha
Panicled amorpha
Anacacho orchid tree
Bird of Paradise
False mesquite
Fairy duster
Eastern coral bean
Scarlet runner bean
Bristly locust
New Mexico locust
Rattlebush
Showy sesbania

## **Magnolia Family:** Tulip tree

#### Four-o'clock Family:

Hierba de la Hormiga Colorado four o'clock Scarlet four o'clock Scarlet muskflower

#### **Phlox Family:**

Scarlet standing cypress Standing cypress Drummond's phlox Polemonium

#### **Buckthorn Family:**

Mexican buckeye

#### Madder Family:

Trompetilla Orange hamelia

#### **Figwort Family:**

Indian paintbrush
Grassland paintbrush
Woolly paintbrush
Cenizo
Snapdragon vine
Havard's penstemon
Cup-leaf penstemon
Three-flower penstemon
Wright's penstemon

#### **Buttercup Family:**

Texas clematis Wild columbine

#### **Rose Family:**

Prairie rose

#### **Nightshade Family:**

Shrubby tobacco

#### Verbena Family:

Lantana

## Do's and Don'ts of Feeder Care

- It is important that chemicals such as insecticides and repellents are not used on or around your feeders. They can be harmful to the birds, even if not applied directly to the area where birds feed. Remember that hummers also eat some insects, and may perch anywhere on or around your feeder. Try to minimize the use of chemicals, pesticides and fertilizers all over your yard.
- Ant moats and bee guards for feeders are inexpensively purchased and easy to make as well. Many of our participants use them and they are very effective. This is the safest way to reduce pest problems.
- It is extremely important that you change the old solution in your feeder and clean it out as often as possible. We recommend that you clean it at least every 2-3 days on a regular basis and more often in hot weather! Many of our Roundup participants report changing the solution nearly every day this is excellent! Bacteria and fungi love a hot sugar solution and can be toxic to your birds!
- Boiling of nectar solution before placing it in the feeder can help retard the spoilage. Keep in mind that boiling is not a method for complete sterilization. Food left in the feeder should be discarded and nectar should never be re-used.
- Red food coloring is unnecessary in hummingbird nectar and may be harmful to the birds. The red color on the feeders is enough to attract these birds. Hummingbird plants and a wildscaped vard will enhance the attraction.
- Use 1 part regular household sugar in 3 to 4 parts water only never use honey or sugar substitutes!
- Some of our participants have reported using cooking oil around feeder ports to deter flying insects. We do not recommend this practice. If you must continue to use this method, be very certain that no oil actually enters the feeder holes where it may contaminate the nectar or coat the bills of the hummingbirds.
- It is very convenient and enjoyable to have your hummingbird feeder near a window where you can view the hummers easily (and share your observations with us). However, if you have had incidences of birds flying into glass windows, there are many possible solutions. Move the feeder to an area where there is less glass to create the reflection of grass, trees, and sky which confuses hummers and other birds. Place stickers, pictures, or other items on windows to draw their attention to the barrier.
- Make sure that your feeder is placed in a safe area, away from cats and other pets.



21)	Have you observed hummingbirds using the: bird bath fountain sprinkler mister other
	List in order of frequency the five plants hummingbirds used most often in your yard.
ee	eder Pests & Other Users
(3)	List the species other than hummingbirds that used your feeder this year.
(4)	Did you see a hummingbird moth at your feeder or flowers this year? Yes No
	Did you observe a hummingbird being attacked? Yes No If yes, a) where? at feeder at flowers perched in flight
	b) what? bee/wasps cat dog hawk oriole roadrunner other
lde	entification Guides
	List any hummingbird identification guides you used (title and author):
	11.10
<b>Ov</b> (	erwintering Observations
	Did any birds visit your feeders during the months of January and February?
	Occasional visits Repeated visits No visits
Cor	mments and Questions
Add	any other comments or questions you might have regarding this year's survey.

## 2007 Overwintering Observations

(January-February 2007)

JANUARY					
WEEK OF	SPECIES	M	F	J	
Jan.					
1-7					
[1]					
total hours	observing				
Jan.					
8-14					
[2]					
total hours	observing				
Jan.					
15-21					
[3]					
total hours	observing				
Jan.					
22-28					
[4]					
total hours	observing				
Jan.					
29-31					
[5]					
total hours	observing				

FEBRUARY									
WEEK OF	SPECIES	M	F	J					
Feb.									
1-4									
[5]									
total hours	observing								
Feb.									
5-11									
[6]									
total hours observing									
Feb.									
12-18									
[7]									
total hours	observing								
Feb.									
19-25									
[8]									
total hours	observing								
Feb.									
26-28									
[9]									
total hours observing									

## **Hummingbird Observations**

Note: Please record your best idea of the number of individuals coming to your feeder.

	MARCH	I				APRIL				MAY				JUNE						JULY				
WEEK OF	SPECIES	M	F	J	WEEK OF	SPECIES	M	F J	WEEK OF	SPECIES	M	F J	T	WEEK OF	SPE	CIES	M	F	J	WEEK OF	SPECIES	M	F	J
Mar.					Apr.				May					June						July				
1-4					1-8				1-6					1-3						1-8				
[9]					[ 14 ]				[ 18 ]					[ 22 ]						[ 26 ]				
total hours	observing				total hours	observing			total hours	observing				total hours	observ	ing				total hours	observing			
Mar.					Apr.				May				ı	June						July				
5-11					9-15				7-13					4-10						9-15				
[ 10 ]					[ 15 ]				[ 19 ]					[ 23 ]						[ 27 ]				
total hours	observing				total hours	observing			total hours	observing				total hours	observ	ing		•	•	total hours	observing			
Mar.					Apr.				May				T	June						July				
12-18					16-22				14-20					11-17						16-22				
[ 11 ]					[ 16 ]				[ 20 ]					[24]						[ 28 ]				
total hours	observing				total hours	observing			total hours	observing				total hours	observ	ing				total hours	observing			
Mar.					Apr.				May				ı	June						July				
19-25					23-30				21-27					18-24						23-29				
[ 12 ]					[ 17 ]				[ 21 ]					[ 25 ]						[ 29 ]				
total hours	observing				total hours	observing			total hours	observing		-		total hours	observ	ing				total hours	observing			
Mar.									May				T	June						July				
26-31									28-31					25-30						30-31				
[ 13 ]									[ 22 ]					[ 26 ]						[ 30 ]				
total hours	observing								total hours	observing				total hours	observ	ing				total hours	observing			

	AUGUS'	Г			S	ЕРТЕМВ	ER				OCTOBE	R			N	OVEMB	ER			I	ECEMBI	ER		
WEEK OF	SPECIES	M	F	J	WEEK OF	SPECIES	M	F	J	WEEK OF	SPECIES	M	F	J	WEEK OF	SPECIES	M	F	J	WEEK OF	SPECIES	M	F	J
Aug.					Sept.					Oct.					Nov.					Dec.				
1-5					1-2					1-7					1-4					1-2				
[ 31 ]					[ 35 ]					[40]					[44]					[48]				
total hours	observing				total hours	observing				total hours	observing				total hours	observing				total hours	observing			
Aug.					Sept.					Oct.					Nov.					Dec.				
6-12					3-9					8-14					5-11					3-9				
[ 32 ]					[ 36 ]					[ 41 ]					[ 45 ]					[ 49 ]				
total hours	observing				total hours	observing				total hours observing		total hours observing				total hours observing								
Aug.					Sept.					Oct.					Nov.					Dec.				
13-19					10-16					15-21					12-18					10-16				
[ 33 ]					[ 37 ]					[ 42 ]					[ 46 ]					[ 50 ]				
total hours	observing				total hours	observing				total hours	observing				total hours	observing				total hours	observing			
Aug.					Sept.					Oct.					Nov.					Dec.				
20-26					17-23					22-28					19-25					17-23				
[ 34 ]					[ 38 ]					[ 43 ]					[47]					[ 51 ]				
total hours	observing				total hours	observing				total hours	observing				total hours	observing				total hours	observing			
Aug.					Sept.					Oct.					Nov.					Dec.				
27-31					24-30					29-31					26-30					24-31	·			
[ 35 ]					[ 39 ]					[44]					[ 48 ]					[ 52 ]				
total hours	observing				total hours	observing				total hours	observing				total hours	observing				total hours	observing			

#### Note:

You can record 2-3 species on this form. Please copy if needed.

M = male F = female

J = juvenile Record unknowns as shown.

#### Example:

#### Use these abbreviations:

MARCH						
WEEK OF	SPECIES	M	F	J		
Mar.	RTHU	3				
1-4	ВСНИ	1				
	unknown		4			
total hours	observing					

RTHU	= Ruby-throated	CAHU	= Calliope
BCHU	= Black-chinned	GRMA	= Green-breasted Mango
RUHU	= Rufous	BBLH	= Broad-billed
BUFH	= Buff-bellied	WEHU	= White-eared
LUHU	= Lucifer	VCHU	<ul><li>Violet-crowned</li></ul>
BLUH	= Blue-throated	COHU	= Costa's
MAHU	= Magnificent	ALHU	= Allen's
BTLH	= Broad-tailed	R/A	= Rufous/Allen's type
BEHU	= Berylline	GRVE	= Green Violet-ear
ANHU	= Anna's		



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